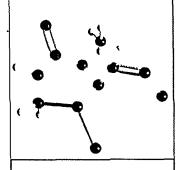


SDMS Doc ID 2015041

8/7 Riverside conference



One-Day Scientific Confection

Perchlorate...

Risk, Regulation and Treatment





During the past 2 years, perchlorate has burst into the lexicon of many households, political arenas, company boardrooms, regulatory agencies, universities and other research bodies, and the Departments of Defense and

Transportation. The tempo of information published on perchlorate has risen dramatically since late December 2002 when the Wall Street Journal ran a front-page article on widespread contamination and health impacts. We are now constantly bombarded with press reports citing human and ecological health risks, proposed national and state regulations, and pervasive contamination of soil and groundwater. With newer and more sensitive analytical methods for detection and the heightened awareness of potential risks, reports abound on the discovery of new locations of contamination from California to Massachusetts. The U.S. Environmental Protection Agency (EPA) has found perchlorate in water in 29 states and believes it may exist in as many as 40 states—anywhere rocket fuel and rockets, automobile airbags, highway flares, and certain fertilizers containing ammonium or potassium perchlorate were made or tested.

Universities, research institutes, and federal and state government agencies are scrambling to evaluate the true human and ecological health impacts posed by perchlorate. The EPA says perchlorate affects production of thyroid hormoncs that may cause adverse health impacts. Athough no conclusive evidence is available, it is also believed that newborns and children may be more susceptible to neurological and other developmental damage.

Controversy and confusion regarding potential regulatory limits raise concern by many. Government and health experts cite safe drinking level standards that range from 1 to 200 parts per billion

(ppb). The EPA proposed a 1 ppb drinking water equivalent level in a January 2002 draft toxicity assessment that has not been finalized pending a review by the National Academy of Sciences. In February 2003, the EPA's Assistant Administrator for the Office of Solid Waste and Emergency Response, Marianne Lamont Horinko issued a memo advising continued use of the provisional reference dose of 4 to 18 ppb developed by the EPA in 1992 until the revised reference dose is finalized. Recently, Senator Barbara Boxer introduced a bill on March 3, 2003, that would require the EPA to establish a maximum standard for perchlorate contamination of 2 to 6 ppb in drinking water supplies by July 1, 2004. Eight states have now passed advisory limits for perchlorate. In California, Governor Gray Davis announced a new law that requires perchlorate be regulated in drinking water by January 1, 2004.

The EPA had planned to issue the new guidelines in 2006.

Estimates for cleanup soar into the billions of dollars. These values are based not only on low cleanup levels, but also on more antiquated treatment technologies. Outdated technologies that require the extraction of contaminated groundwater and treatment in above ground plants cost huge sums of money for capital investment and for long-term system operation and maintenance. More effective and far less costly treatment technologies proven to destroy perchlorate are available today. These technologies dramatically lower the cost of cleanup, regardless of a drinking water standard at 1 or 200 ppb.

Attend this seminar and you will gain a complete, accurate, and well-researched understanding of perchlorate risks and treatment, and aid policy makers in decisions relative to standards development. Join us and meet with the most knowledgeable and influential parties in the perchlorate debate as they share the most current and accurate information and discuss these topics in a roundtable forum.







Speakers & Panel Members...

The Honorable Barbara Boxer U.S. Senate

A fighter for the environment, U.S.
Senator Barbara Boxer has introduced two bills addressing the problems of perchlorate. One directs EPA to establish an enforceable standard by July 2004; the other establishes a public right to know on perchlorate contamination and usage. Senator Boxer is a member of the Senate Environment & Public Works Committee.

Brad Baxter City of Rialto Director of Public Works

Joe Hastey ARCADIS Chief Executive Officer

Dr. Suthan SuthersanARCADIS
National Director, Remediation Services

Dr. Ruddie Clarkson ARCADIS National Director, Risk Services

Dr. William Frankenberger University of California, Riverside Professor of Soil Science and Soil Microbiology

Dr. Mark LosiUniversity of California, Riverside
Director of the Center for Environmental
Microbiology

Beth Jines Cal/EPA Assistant Secretary for Water and Waste Management

Kathy Fletcher Cal/EPA Deputy Secretary for Legislation and External Affairs

Dr. David SpathDepartment of Health Services
Chief, Division of Drinking Water and
Environmental Management

Keith Takata U.S. EPA Region 9 Director of Superfund Division

Dr. Jacimaria Batista University of Nevada, Las Vegas Associate Professor

Eric Lardiere Meggitt Vice President, Secretary & General Counsel

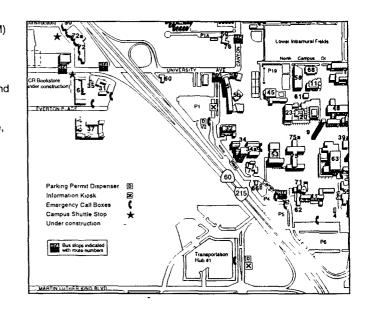
Gerard Thibeault California Regional Water Quality Control Board-Santa Ana Region Executive Officer

Carol Williams
Main San Gabriel Basin Water Master
Executive Officer

John Paul Woodley (invited)
Department of Defense
Assistant Deputy Undersecretary of Defense for
Environment

Conference Details...

Time 8:00 AM to 5:00 PM (Registration begins at 7:00 AM) ರ Location Φ University of California, Riverside (UCR); University Lecture Hall (Bldg. 68) コ From 60 Freeway East: Exit at University Avenue and Directions turn left. Go to second light and make a right onto Campus Drive. Follow signs to parking lot #30 / Φ Transportation Hub #1. There is a \$6.00 parking fee, α and a shuttle will be available to the lecture hall. Lodging (Ask for UCR rates at all locations) 0 Comfort Inn: 909.683.6000 Courtyard by Marriott: 909.276.1200 $\boldsymbol{\sigma}$ Mission Inn: 909.784.0300 To Register Contact Marie Peikert at University of California, S Riverside Phone/E-mail 909.787.3093/mariep@citrus.ucr.edu Φ



The Agenda...

Topic	Speaker	Time
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Registration		7:00 - 8:00
Introduction	Joe Hastey	8:00 - 8:15
Human and Ecological Exposure Impacts	Dr. Ruddie Clarkson	8:15 - 8:45
Regulatory Framework	Kathy Fletcher Keith Takata Dr. David Spath Gerard Thibeault	8:45 - 10:15
BREAK		10:15 - 10:45
Remediation Challenges	John Paul Woodley Eric Lardiere Carol Williams Brad Baxter	10:45 - 12.15
LUNCH		12:15 - 1:30
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Keynote Speaker	Senator Barbara Boxer	1:30 - 2:00
Treatment Technologies	Dr. Suthan Suthersan	2:00 - 2:30
Safe Drinking Water Standards – Panel Discussion	Beth Jines (moderator)	2:30 - 3:45
BREAK		3:45 - 4:00
Treatment Technologies – Panel Discussion	Dr. William Frankenberger (moderator)	4:00 - 5:00



This one-day conference is by invitation only!

Attendance is limited— Register today!

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Register today!

Perchlorate... Fact or Fiction?

Risk, Regulation and **Treatment**

August 7, 2003 Registration: 7:00 AM Conference: 8:00 AM to 5:00 PM University of California, Riverside



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Invitation only conference details insid

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Intrastructure, buildings, environment, communications

